



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS MI 48303

COPY MAILED

OCT 26 2006

In re Application of
Schneider
Application No. 10/674,615
Filed: September 30, 2003
Attorney Docket No. 7784-000553CPA
FOR: POLYMER COMPOSITE STRUCTURE
REINFORCED WITH SHAPE MEMORY ALLOY
AND METHOD OF MANUFACTURING SAME

:
:
:
:
:

OFFICE OF PETITIONS

**DECISION DISMISSING
PETITION**

This is a decision on the petition under 37 CFR 1.137(a), filed August 10, 2006, to revive the above-identified application.

The petition under 37 CFR 1.137(a) is **DISMISSED**.

Any further petition to revive the above-identified application must be submitted within TWO (2) MONTHS from the mail date of this decision. Extensions of time under 37 CFR 1.136(a) are permitted. The reconsideration request should include a cover letter entitled "Petition under 37 CFR 1.137(a)." This is **not** final agency action within the meaning of 5 U.S.C. § 704.

The above-identified application became abandoned for failure to timely reply to non-final Office action, mailed November 30, 2004, which set an extendable period for reply of three (3) months. Having filed no reply, this application became abandoned on March 1, 2005. A Notice of Abandonment was mailed on June 29, 2005.

Petitioner states that the delay was unavoidable because the non-final Office action mailed on November 30, 2004 was not received at the correspondence address of record.

A grantable petition to revive an abandoned application under 37 CFR 1.137(a) must be accompanied by (1) the required reply, unless previously filed. In a nonprovisional application abandoned for failure to prosecute, the required reply may be met by the filing of a continuing application. In an application or patent, abandoned or lapsed for failure to pay the issue fee or any portion thereof, the required reply must be the payment of the issue fee or any outstanding

balance thereof; (2) the petition fee as set forth in § 1.17(l); (3) a showing to the satisfaction of the Director that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition pursuant to this paragraph was unavoidable; and (4) any terminal disclaimer (and fee as set forth in § 1.20 (d)) required pursuant to paragraph (c) of this section.

This petition does not satisfy requirements (1) and (3).

With respect to (1), petitioner has not submitted a reply to the November 30, 2004 non-final Office action.

A copy of the November 30, 2004 non-final Office action is enclosed. This should enable petitioner to craft an appropriate reply.

With respect to (3), the showing of record is inadequate to establish unavoidable delay within the meaning of 37 CFR 1.137(a). Specifically, an application is "unavoidably" abandoned only where petitioner, or counsel for petitioner, takes all action necessary for a proper response to the outstanding Office action, but through the intervention of unforeseen circumstances, such as failure of mail, telegraph, telefacsimile, or the negligence of otherwise reliable employees, the response is not timely received in the Office. Ex parte Pratt, 1887 Dec. Comm'r Pat. 31 (Comm'r Pat. 1887).

The Director may revive an abandoned application if the delay in responding to the relevant outstanding Office requirement is shown to the satisfaction of the Director to have been "unavoidable". 35 U.S.C. § 133. Decisions on reviving abandoned applications have adopted the reasonably prudent person standard in determining if the delay was unavoidable. Ex parte Pratt, 1887 Dec. Comm'r Pat. 31, 32-33 (Comm'r Pat. 1887) (the term 'unavoidable' "is applicable to ordinary human affairs, and requires no more or greater care or diligence than is generally used and observed by prudent and careful men in relation to their most important business"); In re Mattullath, 38 App. D.C. 497, 514-15 (D.C. Cir. 1912); Ex parte Henrich, 1913 Dec. Comm'r Pat. 139, 141 (Comm'r Pat. 1913). In addition, decisions on revival are made on a "case-by-case basis, taking all the facts and circumstances into account." Smith v. Mossinghoff, 671 F.2d 533, 538, 213 USPQ 977, 982 (D.C. Cir. 1982). Finally, a petition to revive an application as unavoidably abandoned cannot be granted where a petitioner has failed to meet his or her burden of establishing the cause of the unavoidable delay. Haines v. Quigg, 673 F. Supp. 314, 5 USPQ2d 1130 (N.D. Ind. 1987).

The showing required to establish non-receipt of an Office communication must include:

1. A statement from the practitioner stating that the Office communication was not received by the practitioner and attesting to the fact that a search of the file jacket and docket records indicates that the Office communication was not received.

2. A copy of the docket record where the non-received Office communication would have been entered had it been received and docketed must be attached to and referenced in practitioner's statement.

A review of the record indicates no irregularity in the mailing of the November 30, 2004 non-

final Office action, and in the absence of any irregularity there is a strong presumption that the communication was properly mailed to the applicant at the correspondence address of record. This presumption may be overcome by a showing that the aforementioned communication was not in fact received.

Petitioner has not proven non-receipt because (1) practitioner has not attested to the fact that a search of the file jacket indicates that the Office communication was not received and (2) practitioner has not included a copy of the docket record where the non-received Office communication would have been entered had it been received and docketed.

In addition, the Office would like a statement from the person /persons who searched the HDP docket records. The petition indicates that an individual/individuals in the HDP docketing department reviewed the docket records and confirmed there was no record of HDP receiving the November 30, 2004 non-final Office action. It appears that someone other than the practitioner filing this petition performed the actual search of the docket records.

Further correspondence with respect to this matter should be addressed as follows:

By mail: Mail Stop PETITION
Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313-1450

By hand: U.S. Patent and Trademark Office
Customer Service Window, Mail Stop Petition
Randolph Building
401 Dulany Street
Alexandria, VA 22314

By FAX: (571) 273-8300 - ATTN: Office of Petitions

Telephone inquiries concerning this decision should be directed to the undersigned at (571) 272-3230.



Shirene Willis Brantley
Senior Petitions Attorney
Office of Petitions
Office of the Deputy Commissioner
for Patent Examination Policy

enclosures: copy of November 30, 2004 non-final Office action
 copy of Notice of References Cited (PTO-892)
 copy of Information Disclosure Citation ((PTO-1449)



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,615	09/30/2003	Terry L. Schneider	7784-553/CPA	4204
27572	7590	11/30/2004		
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303				
			EXAMINER DIXON, MERRICK L.	
			ART UNIT 1774	PAPER NUMBER

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,615

Applicant(s)

SCHNEIDER, TERRY L.

Examiner

Merrick Dixon

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCEt filed 9-24-04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-16 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-16 and 19-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



MERRICK DIXON
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date see office action.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

15

The instant application includes two(2) initialed and signed PTO-1449.

PTO-1449 having date of 2-9-04

PTO-1449 having date of 9-24-04.

16

The abstract of the disclosure is objected to because it contains the legal word, "comprise". Correction is required. See MPEP § 608.01(b).

17

It is noted that claims 14 and 2 are identical. Applicants are requested to make appropriate corrections.

18

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467,

Art Unit: 1774

114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

19

Claims 1-6 and 9-12, and 14 provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-6 and 9-12 of copending Application No. 10/287561. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

20

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

21

1. Claims 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Hohman(US 5,871,604).

The cited reference teaches the claimed process comprising providing first and second fiber layers , placing a layer of a resin matrix with particles therein between the layers and heating the resulting laminate to form a composite structure- col 2, lines 34-45; col 8, lines 66- col 9, line 56. Concerning claims 20-23, the claimed type of particles used in

Art Unit: 1774

the resin matrix, the particles' shapes and dimensions, are directed to article limitations and are of no patentable consequences to the instant question for patentability which must be manipulatively distinct. Ex parte Pfeiffer, 1962 C.D. 408(1961).

22

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohman(US 5,871,604) in view of Hagood IV et al(US 6,048,622).

The primary reference to Hohman teaches the basic claimed invention including a process for making a composite structure including the the manipulative steps of providing first and second fiber layers and placing a layer of resin matrix , with particles dispensed therein, between the layers and heating the resulting laminate to produce a composite structure- col 2, lines 34-45; col 8, lines 66- col 9, line 56. The cited primary reference while teaches including particles in its patented resin material , fails to expressly teach SMA particles. The secondary reference to Hagood IV et al, however teaches that it is known in the instant art to utilize SMC particles in resin matrix when

forming similar types composite material such as the primary reference – col 12, lines 13-29. It would have been obvious to one of ordinary skill in the art at the time the invention is made to combine the teachings of the secondary reference and include SMC particles in Hohman's resin, in an attempt to make composite of desired properties/characteristics, see above and see primary reference, col 8, lines 62-65. This combination would have been further obvious in the absence of unexpected results. Concerning claims 15-16, the secondary reference in col 12, lines 5-29 teaches that the SMA particles would be necessarily deformed. It is submitted that the resulting diameters and shape of the particles would also be manipulated as same is deformed in the absence of unexpected results. Concerning claims 17 and 18, the secondary reference also teaches heating and curing the composite with the particles therein- see col 11, lines 30-45, it is accordingly submitted that the particles would experience phase changes during such operation. Additionally, it is submitted that the claimed diameters would have been readily obtained by the skilled artisan , if not disclosed, as such optimum value of a result effective variable, as diameters, involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

23

Applicants who wish to send a facsimile (draft copies) for the examiner's immediate review can do so by using the Examiner's personal fax number at 571-273-1520. The

faxing of all papers must conform with the notice published in the Official Gazette, 1096

O.G. 30 (November 15, 1989). **NOTE: All facsimiles sent to the examiner's**

personal fax number should be in draft-forms and will be treated as informal.

Same facsimiles will not be entered in the related applications unless

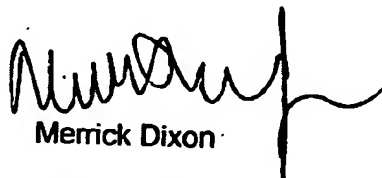
otherwise agreed and noted by the examiner.

The fax number for all other fascimile is 703-872-9306.

Information about the **status of an application** may be obtained from the Patent Information Retrieval system (**Private PAIR**).

Status inquires for **published applications** may be retrieved from either **Private PAIR** or **Public PAIR**. Questions about the PAIR system should be directed to the Electronic Business Center at **866-217-9197**.

Any questions concerning the instant communication should be directed to Examiner Dixon, at 571-272-1520, Mondays to Thursdays, between 12 noon and 8 PM, eastern time . The examiner's supervisor, Mrs. Rena Dye, can be reached at 571-272-3186.



Merrick Dixon

Primary Examiner

Group 1700

Notice of References Cited

Application/Control No.

10/674,815

Applicant(s)/Patent Under
Reexamination
SCHNEIDER, TERRY L.

Examiner

Merrick Dixon

Art Unit

1774

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,871,604	02-1999	Hohman, Alvin E.	158/62.8
	B	US-6,048,622	04-2000	Hagood et al.	428/461
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20041104

FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION
 (Use several sheets if necessary)

SEP 24 2004

Sheet 1 of 1

ATTORNEY DOCKET No.

SERIAL No.

7784-000553CPA

10/674,615

APPLICANT

Schneider

FILING DATE

9/30/03

GROUP

1774

U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.	MS	5,804,276	09/1998	Jacobs et al		

FOREIGN PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes No	
1.	MS	H4-207100	07/1992	Japan			
2.	MS	H6-36613	02/1994	Japan			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

Ref. Desig.	Examiner's Initials	
1.		

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Sheet 1 of 1

ATTORNEY DOCKET NO.	SERIAL NO.
7784-000553/CPA	10/674,615
APPLICANT	
Terry L. Schneider	
FILED DATE	GROUP
September 30, 2003	1772

U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.	<i>W</i>	5,614,305	03/1997	Paine et al		

FOREIGN PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.							

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

Ref. Desig.	Examiner's Initials	
1.	<i>W</i>	Ni-Ti SMA-Reinforced Al Composites by G.A. Porter, P.K. Liaw, T.N. Tieg and K.H. Wu, October, 2000
2.	<i>W</i>	"Preparation of a smart composite material with TiNiCu shape memory particulates in an aluminum matrix" by Z.G. Wei, C.Y. Tang, W.B. Lee, L.S. Cui and D.Z. Yang; October 1997
3.	<i>W</i>	"Increased Impact Damage Resistance of Shape Memory Alloy Composites" by Kelly A. Tsoi, Rudy Stalmans, Martine Wevers, Jan Schrooten and Yiu-Wing Mai; date unknown
4.	<i>W</i>	"Fracture toughening mechanism of shape memory alloys due to martensite transformation" by Sung Yi and Shan Gao; date unknown
5.	<i>W</i>	"On the Interaction Between Transformation Toughening and Crack Bridging by Ductile Layers in Hybrid Composites" by M. Li, N. Katsube and W.O. Soboybio, Journal of Composite Materials, Vol. 35, No. 12/2001
6.	<i>W</i>	"The Evolution of an Aerospace Material: Influence of Design, Manufacturing, and In-Service Performance" by Alan G. Miller and Donald T. Lovell and James C. Seferis; Composite Structures 0263-8223/93/S06.00; 1993 Elsevier Science Publishers Ltd., England

Examiner: *W*

Date Considered: 11/04

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.